

What is claimed is:

1. A computer-readable medium having computer-executable
5 components for controlling a hardware device of a given device
type installed in a computer system, comprising:

a first device driver for interacting with, through a
device driver interface, an application running on the
computer system; and

10 a second device driver programmed to support entry point
functions corresponding to a pre-selected set of operation
commands generic to devices of the given device type, the
entry point functions callable by the first device driver for
controlling operations of said hardware device,

15 the first device driver programmed for receiving, through
the device driver interface, a request from the application
for a requested operation by the hardware device, and calling
the entry point functions of the second device driver to
control the hardware device to perform the requested
20 operation.

2. A computer-readable medium as in claim 1, where in
the hardware device is an image-capturing device.

25 3. A computer-readable medium as in claim 2, wherein the
hardware device is a flatbed scanner.

4. A computer-readable medium as in claim 3, wherein the requested operation is a scan operation.

5. A computer-readable medium as in claim 4, wherein the entry point functions supported by the second server are callable to set parameters for the scan operation, and to initiate the scan operation.

6. A computer-readable medium as in claim 1, wherein the first device driver is further programmed to pass to the second device driver a data structure for storing operation parameter settings by the second device driver.

7. A computer-readable medium as in claim 1, wherein the computer-executable components further includes a third device driver for a second hardware device, the third device driver programmed to interact with the application through the device driver interface for receiving requests for operations by the second hardware device and to control the second hardware device to perform the requested operations.

8. A computer readable medium having computer-readable instructions for controlling a hardware device of a given device type installed in a computer system to perform operations in response to requests by an application running on the computer system, comprising:

passing, through a device driver interface to a first device driver, a request from the application for a requested operation by the hardware device;

calling, by the first device driver, a second device driver through entry point functions of the second device driver, the entry point functions corresponding to operation commands generic to devices of said given device type, and

controlling, by the second device driver in response to the calling of the entry point functions by the first driver, the hardware device to perform the requested operation, wherein the entry point functions perform actions including setting parameters of the requested operation and initializing the requested operation.

9. A computer-readable medium as in claim 8, wherein the step of calling includes passing a data structure to the second device driver for storing operation parameter settings by the second device driver.

10. A computer-readable medium as in claim 9, wherein the hardware device is an image-capturing device.

11. A computer-readable medium as in claim 10, wherein the hardware device is a flatbed scanner.

12. A computer system comprising:
a hardware device of a given type;

an operating system having a device driver interface and a plurality of device drivers, including a first device driver and a second device driver cooperating to operate the hardware device, the second device driver being written for the

5 hardware device and implementing entry point functions callable by the first device driver to control operations of the hardware device, the entry point functions corresponding to a pre-selected set of operation commands generic to devices of said given device type,

10 the first device driver programmed for receiving, through the device driver interface of the operating system, a request from an application running on the computer system to perform a requested operation by the hardware device, and calling the entry point functions of the second device driver to control

15 the hardware device to perform the requested operation.

13. A computer-readable medium as in claim 12, wherein the hardware device is an image-capturing device.

20 14. A computer-readable medium as in claim 13, wherein the hardware device is a flatbed scanner, and the requested operation is a scan operation.

25 15. A computer-readable medium as in claim 14, wherein the entry point functions performs actions including setting parameters for the scan operation, and initiating the scan operation.

16. A method of controlling a hardware device of a given device type installed in a computer system, comprising:

interacting, by a first device driver, with an application running on the computer system through a device driver interface to receive from the application a request for performing a requested operation by the hardware device; and

calling, by the first device driver, entry point functions of a second device driver to control the hardware device to perform the requested operation, the entry point functions corresponding to a pre-selected set of operation commands generic to devices of the given device type and callable by the first device driver for controlling operations of said hardware device.

17. A method as in claim 16, where in the hardware device is an image-capturing device.

18. A method as in claim 17, wherein the image-capturing device is a flatbed scanner.

19. A method as in claim 18, wherein the requested operation is a scan operation.

20. A method as in claim 19, wherein the entry point functions supported by the second server are callable to set parameters for the scan operation, and to initiate the scan operation.

21. A method as in claim 16, further including the step
of passing to the second device driver a data structure for
storing operation parameter settings by the second device
5 driver.

2025 RELEASE UNDER E.O. 14176